

## OptoLink

- ▶ System for transmission of incremental encoder signals in an optical fiber
- ▶ Typical areas of use:
  - In environments with high electromagnetic disturbances
  - Transmission of signals over long distances
  - Where galvanic insulation is required



## ELECTRICAL SPECIFICATION

### Transmitter

|                                   |                    |
|-----------------------------------|--------------------|
| Supply voltage +EV                | 9-30Vdc            |
|                                   | Polarity protected |
| Current consumption excl. encoder | Max 2W             |
| Startup delay                     | 10ms               |
| Encoder connection                | HTL                |
| Power supply                      | Same as +EV        |
| Input frequency range             | 0...200kHz         |
| Input load                        | 2,4kOhm            |
| Fibre (not included)              | 62,5µm, multimode  |
| Max length                        | 1,5km              |
| Connectors                        | ST-type            |

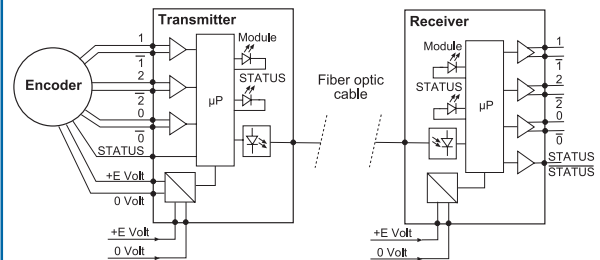
### Receiver

|   |   |
|---|---|
| Supply voltage +EV                          | 9-30Vdc   |
|   | Polarity protected                                    |
| Current consumption without load            | Max 2W  |
| Startup delay                               | 10ms  |
| Outputs                                     | HTL   |
|   | Short circuit protected                               |
| Load max                                    | ± 40mA  |
| Max cable length                            | 200m @ 50kHz  |
| U <sub>high</sub> (at 10mA load)            | > +EV -2,0V   |
| U <sub>low</sub> (at 10mA load)             | < 1,15V   |
| Frequency range                             | 0...200kHz  |
| Propagation delay from input in Transmitter | 3µs excluded delay in fibre (delay in 1km fibre: 5µs) |

## ACCESSORIES

|                          |                            |
|--------------------------|----------------------------|
| Fibre to OptoLink system |                            |
| Free length              | Contact Leine & Linde      |
| Encoders                 | See datasheet for encoders |

## SYSTEM DESCRIPTION

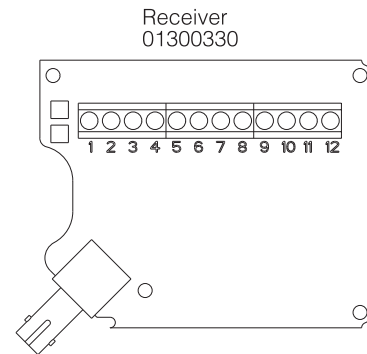
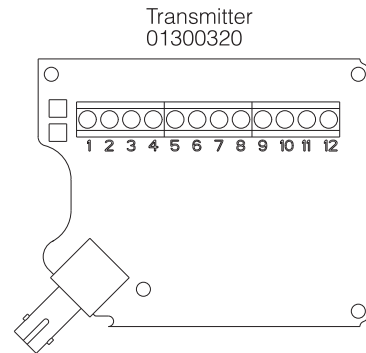
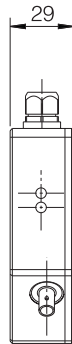
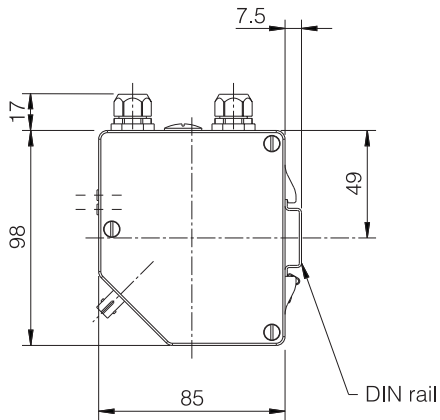


## CONNECTION

| Transmitter          | Terminal | Receiver | Terminal |
|----------------------|----------|----------|----------|
| +EV (Encoder supply) | 1        | +EV      | 1        |
| 0V (Encoder supply)  | 2        | 0V       | 2        |
| 1                    | 3        | 1        | 3        |
| 1̄                   | 4        | 1̄       | 4        |
| 2                    | 5        | 2        | 5        |
| 2̄                   | 6        | 2̄       | 6        |
| 0                    | 7        | 0        | 7        |
| 0̄                   | 8        | 0̄       | 8        |
| STATUS               | 9        | STATUS   | 9        |
| +EV (Supply)         | 11       | STATUS   | 10       |
| 0V (Supply)          | 12       |          |          |



# OptoLink



## MECHANICAL SPECIFICATION

|                    |                            |
|--------------------|----------------------------|
| Housing            | Aluminium                  |
| Weight             | Approx. 400g               |
| Protection class   | IP 65 according to IEC 529 |
| Temperature        |                            |
| Operating          | -20°C ... +70°C            |
| Storage            | -20°C ... +70°C            |
| LED indication     | Module & Bus               |
| Connection fibre   | 62,5µm ST type             |
| Connection encoder | Screw terminal             |

## ORDERING INFORMATION

### Available models

**01300320**  
Optolink Transmitter

**01300330**  
Optolink Receiver

**Leine&Linde** ISO 9001 / ISO 14001 certified

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04-06-17 PS. Specifications can be changed without prior notice.